

REMARKS

The present amendment is submitted in response to the Office Action mailed December 27, 2006. Claims 1-22 are currently pending in the application. No new matter or issues are believed to be introduced by this amendment. In view of the amendments above and the remarks to follow, reconsideration and allowance of this application are respectfully requested.

112 Claim Rejections

Claims 6, 12 and 15 were rejected under 35 U.S.C. §112, second paragraph. Specifically, each claim is cited by the Examiner for reciting a limitation for which there is insufficient antecedent basis. Claims 6, 12 and 15 have been amended in a manner which is believed to overcome the rejections noted by the Examiner. Accordingly, withdrawal of the rejection to the claims is respectfully requested.

35 U.S.C. §103(a)

In the Office Action, Claims 1 - 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,823,342 to Wallen et al. (hereinafter Wallen) in view of U.S. Patent No. 6,944,515 to Nakajima et al. (hereinafter Nakajima).

It is respectfully submitted that Claims 1 – 22 are patentable over the cited references, alone and in combination, for at least the following reasons.

Wallen, as read by the applicants, relates to an independent method for configuring and extracting detailed manufacturing knowledge for fabricating an object, tool or part and storing the data to a data file or data structure. The method includes the extraction of design criteria from one or more design data files. The design criteria is captured in a meta-data file. The design criteria is parsed into elemental manufacturing building modules independent of the data file and stored to a meta-data file and a database, wherein the database includes the extracted design criteria and the elemental manufacturing building modules. Manufacturing knowledge and data not contained in the design data file is incorporated into the meta-data. The database is accessed and manufacturing knowledge is extracted, if any, to optimize the manufacturing process of the object to be fabricated and incorporated (i.e. encapsulated in) to the meta-data file, wherein the meta-data file is independent of the one or more design data files from which the design criteria was extracted and the meta-data file is capable of directing the manufacturing of the object.

In the instant Office Action, the Examiner asserts that Wallen in view of Nakajima discloses the invention as claimed. With particular reference to Independent Claim 1, the Examiner asserts that Wallen teaches all of the steps of claim 1 with the exception of step (e). The Examiner cites Nakajima for teaching step (e) - *retrieving a list of drawings at said MIS satisfying said submitted database search query.*

It is respectfully submitted that Wallen in view of Nakajima does not teach or suggest the recitations of independent Claim 1. More particularly, it is respectfully submitted that Wallen does not teach or suggest step (a) of Claim 1, which recites –

- (a) identifying at said MIS at least one outside vendor
supplying at least one material included in a
notification of drawing change issued from said MIS;

It is submitted that there is no teaching or disclosure in Wallen related to a “**notification**” nor to a - “**notification of drawing change**”. A word search was performed on the specification of Wallen in an attempt to find a single teaching or reference to a - “**notification**” or more particularly to a “**notification of drawing change**”. Relevant keywords were chosen to perform the word search, such as, for example – “notify”, “notification”, “inform”, “communicate”. The search yielded no positive result. It is therefore submitted, in light of the search result, that Wallen does not teach or disclose a “**notification of drawing change**”, as recited in step (a) of Independent Claim 1.

In further support, upon performing a word search of the word “**drawing**” in Wallen, two instances were found in the detailed description, with neither instance making a reference to a “**drawing change**”.

Specifically, the term “drawing”, without reference to a “drawing change”, is found in Warren in the detailed description at Col. 8, lines 4-11 and at Col. 8, lines 50-63 -

The design data file can be generated by many different program sources such as CAE, CAD, CAM, CAPP, Planning Systems, and tool path programs, among others, as shown in prior art FIG. 1. Also any **drawings**, plans and databases containing standards, best practices etc. can also be accessed and utilized to provide the meta-data file with additional manufacturing information. Basically, the detail knowledge can come from any extractable source.

Product data management (PDM) software and systems organize, manage and track products, **drawings** and design or model data via a database management system and is utilized to control information, files, documents and work processes necessary to design, manufacture, support, distribute and maintenance of a product. The information typically managed by the PDM includes, but is not limited to, design geometry, **engineering drawings**, project plans, part files, assembly diagrams, product specifications NC machine-tool programs, analysis results, correspondence, bills of material (BOMs) and engineering change orders (ECOs). Essential PDM software provides the conduit for ideas, information and changes throughout supply and manufacturing chains.

The disclosure only discusses providing a meta-data file from a number of sources including drawings, plans, etc. with no reference to a drawing change. There is no disclosure to the term “drawing change” in Wallen because Wallen is directed to the unidirectional flow of information from a number of outside sources to more fully inform a meta-data file. In contrast, the invention is directed to a method for improving the organization and dissemination of information in an MIS system by notifying vendors in a secure and expedient fashion regarding drawing changes that they must respond to. In this manner, the flow of information is diametrically opposite to that of Wallen.

Given that Wallen does not teach step (a), for at least the reasons described above, it follows that Wallen does not teach steps (b) and (c), which also refer to a “**notification of drawing change**”

- (b) issuing said **notification of drawing change** from said MIS to said at least one outside vendor identified at said step (a);
- (c) accessing an MIS website by said at least one outside vendor responsive to said issued **notification**;

With continued reference to step (c), it is further submitted that an outside vendor does not access the MIS website, responsive to said issued notification. The Examiner asserts that Wallen teaches step (c) at Col. 14, lines 13-23 and at Col. 18, lines 28-37.

Col. 14, lines 13-23 recite:

The supplier can then access the MDF Viewer application module 525, **to review the manufacturing strategy developed throughout the process**. The MDF is then tailored for the specifics of the selected supplier in module 540. This is accomplished in the Tool Path Advisor application utilizing the Integrated Producers (VIP)--Suppliers Capabilities Database as defined by module 424. Computer Aided Manufacturing (CAM) operations are created, in the suppliers desired CAM system software, by linking the MDF to the CAM system through Application Programming Interfaces (API) links module 545. **[Emphasis Added]**

Regarding the disclosure of Wallen at Col. 14, lines 13-23, the supplier accesses the MDF Viewer, not in response to an issued notification, as recited at step (c), but instead, to review the manufacturing strategy developed throughout the process.

Col. 18, lines 28-37 recite:

The ability to view MDFs is accomplished through a MDF viewer 525. The MDF viewer is Internet enabled software that can be accessed from the host website, anywhere in the world. **The viewer allows review of MDF data, but not updates or changes.** It is determined via module 1102, as shown in FIG. 11, if the user does not have access to a MDF viewer, the user is prompted to download a version. Via module 1104, the user accesses the host web site and downloads an appropriate viewer. The user then configures the viewer via module 1108. **[Emphasis Added]**

Regarding the disclosure of Wallen at Col. 18, lines 28-37, the supplier accesses the MDF Viewer, not in response to an issued notification, as recited at step (c), but instead, to review the MDF data. Moreover, lines 30-31 (highlighted) recites that it is to review the MDF data, but not updates or changes. This statement teaches away from the recitation of step (c), in that an issued notification is equivalent to an update or change.

With reference now to step (d) of Claim 1, it is submitted that Wallen does not teach this step for at least the following reasons. Step (d) recites –

(d) submitting a database search query by said at least one outside vendor at said MIS website including search criteria for viewing drawings prepared by and stored at said MIS;

The Examiner asserts that Wallen teaches step (d) at Col. 16, lines 32-50, which recites –

In the Supplier Search Advisor application 480, capable suppliers are identified and their possible capability deficiencies are documented. The application checks via

module 802, as shown in FIG. 8, as to whether or not a MDF file and all associated part attributes have been defined and are active and available. If there is no current MDF, the user is prompted via module 804 to select a MDF. The user can select from a MDF library, defined in module 806, or from a local file or database module 808.

Once the MDF is selected, additional attributes are defined for the part in module 810. This includes all major manufacturing activities, part material, part size and complexity, among others. In module 812, the part attributes necessary to search for suppliers are extracted from the MDF. Utilizing a search algorithm via module 814, **the part manufacturing requirements are compared to supplier capabilities.** The user can select suppliers to search in the system from the entire worldwide database, a particular geographical region, a specific manufacturing capability, or a reduced list, possible of only one, of possible suppliers. **[Emphasis Added]**

Regarding the disclosure of Wallen at Col. 16, lines 32-50, the supplier utilizes a search algorithm, not to view drawings prepared by and stored at said MIS, as recited at step (d), but instead, compare the part manufacturing requirements with supplier capabilities.

With reference now to step (f) of Claim 1, it is submitted that Wallen does not teach this step for at least the following reasons. Step (f) recites –

(F) filtering said retrieved list of drawings at said MIS
to exclude drawings unrelated to said at least one
outside vendor;

The Examiner asserts that Wallen teaches step (f) at Col. 16, line 59 through Col. 17, line 18, which recites –

Once the raw supplier data is generated for the part, a report is generated via module 818. The report formats the data based on user selections. The report will be generated and managed in the system, as described in module 820. If desired, a regional considerations report is analyzed in module 822. **This report includes regional issues for fabrication like availability of special processing capabilities, availability of knowledge workers, and sourcing alternatives.** The Integrated Produces (VIP) Supplier Capability Database 424, further defined in module 816,

provides the detailed supplier capabilities and the regional consideration rules. A report is generated and configured for the user via module 826. [Emphasis Added]

The Producibility Advisor identifies, configures, manages, and stores manufacturing rules and knowledge from a producibility session. These producibility sessions occur between a design and one or more manufacturing experts. Given a MDF file and corresponding part attributes, the system searches for producibility rule violations in module 902, as shown in FIG. 9. This is accomplished by searching for conditions in the MDF that have similar conditions to a manufacturing rule, defined in the Companies Best Practices Knowledge Base module 904. A report is developed for the user via module 906. The report contains a list of all of the producibility violations, descriptions of the violations, ways to resolve the problems, and potential costs associated to the items.

Regarding the disclosure of Wallen at Col. 16, line 59 through Col. 17, line 18, the Examiner asserts in the Office Action that the retrieved list is filtered to exclude unnecessary data. This characterization is vague and non-descript. Step (f) clearly states that drawings are excluded based solely on their being unrelated to at least one outside vendor. It is submitted that there is no analogous language in the above recitation to suggest that the report in Wallen is filtered to exclude drawings (parts) unrelated to an outside vendor (supplier). In fact, the recitation above makes explicit reference as to what the report may include, i.e., regional issues....., availability of knowledge workers and sourcing alternatives, but makes no mention of filtering unnecessary data, as alleged by the Examiner.

It is respectfully submitted that at least the limitations and/or features of Claim 1 described above, are not disclosed or suggested by Wallen and Nakajimi, alone, and in combination.

Accordingly, applicant respectfully request withdrawal of the rejection under 35 U.S.C. §103(a) with respect to Claim 1 and allowance thereof is respectfully requested.

Additionally, Claims 2-11 depend from independent Claim 1 and therefore contain the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claims 2-11 are believed to be allowable over Wallen and Nakajimi, alone and in combination.

Independent Claim 12 recites similar subject matter as Claim 1 and therefore contain the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claim 12 is believed to contain patentable subject matter. Accordingly, applicant respectfully requests withdrawal of the rejection under 35 U.S.C. §103(a) with respect to Claim 12 and allowance thereof is respectfully requested.

Claims 13 - 22 depend from Claim 12 and therefore include the limitations of Claim 12. Accordingly, for the same reasons given above for Claim 12, Claims 13-22 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejections with respect to Claims 13-22 and allowance thereof are respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1- 22 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Frank Keegan, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-333-9669.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael A. Scaturro", is written over a horizontal line.

Michael A. Scaturro
Reg. No. 51,356
Attorney for Applicant

Mailing Address:
Intellectual Property Counsel
Philips Electronics North America Corp.
P.O. Box 3001
345 Scarborough Road
Briarcliff Manor, New York 10510-8001